

caudal margins of the subterminal segments obscure yellow; shield of the ovipositor black, very long, subcylindrical to slightly compressed, carinate dorso-medially. Ovipositor with only the tergal valves functional, these appearing as flattened, chitinized, rectangular blades, the margins smooth, the caudal-proximal angle produced caudad and laterad into a powerful spine.

Habitat.—California.

Holotype, male, Elmira, April 7, 1921 (B. G. Thompson); Sac. No. 2185.

Allotype, female, Galt, March 29, 1921 (B. G. Thompson); Sac. No. 2164.

Paratopotypes, 5 males, April 7 and 12, 1921 (Nos. 2186, 2187, 21103, 21105, and 21106).

Paratypes, 1 male, Dixon, March 31, 1921, No. 2176; 2 males, 3 females, April 12, 1921 (Nos. 21101, 21102, and 21100, 2198, 2199); Franklin, April 1, 1921 (No. 2178); Galt, April 1, 1921 (No. 2177).

Type in the collection of the National Museum.

Tipula graminivora is allied to *T. quaylii* Doane, *T. bituberculata* Doane, *T. calhuilla* Alexander and others, especially to *T. quaylii*, but is a remarkably distinct species.

NEW AMERICAN LEPIDOPTERA AND RECORDS

BY HARRISON G. DYAR

Family HESPERIDÆ

Butleria bubobon, new species.

Black above with bronzy brown reflection; fore wing with an oblique quadrate yellow spot in the cell, with two diffused spots below, reversely oblique; three small subapical spots approximated, one above vein 3, a larger one above vein 2, more inwardly, with a small dark yellow spot next to it, the other side of the vein. Hind wing with dark yellow spot in the disk and outer row of four, outermost large, second minute, third and fourth separated by vein 2; fringe with pale checkers. Be-

low, spots repeated, enlarged; fore wing with an additional spot at end of cell and terminal row above vein 3. Hind wing with numerous yellow spots and shadings filling in the space between the repeated markings; three rounded spots along costa. Expanse, 36 mm.

Type, male, No. 24094, U. S. Nat. Mus.; Guerrero, Mexico, July, 1920 (R. Müller).

Family SPHINGIDÆ

Perigonia lusca bahamensis Clark.

Perigonia lusca bahamensis Clark, Proc. N. E. Zool. Club, vi, 108, 1919.

This brightly marked form of *lusca* Fab., described from the Bahamas, occurs also in Florida. It seems to us to represent a distinct race, and not a variety of *interrupta* Walk., as Mr. Clark has been inclined to consider it in a later publication.

Paradise Key, Florida, February, 1919 (Schwarz & Barber).

Family LITHOSIIDÆ

Illice bellicula, new species.

Fore wing gray, with a pink spot at outer third of costa and one at tornus, the latter joined to base by a yellowish ray. Hind wing pink, a large gray spot at tip. Head and thorax gray, back of head, collar, patagia and abdomen pink. Expanse, 14 mm.

Types, three males, No. 24343, U. S. Nat. Mus.; Florida (Schaus collection) and Paradise Key, Florida, March 1, 1919 (Schwarz & Barber).

Nearest to *subjecta* Walker, smaller, the pink parts much redder, the wings narrower, the markings narrow and delicate.

Family NOCTUIDÆ

Subfamily HADENINÆ

Perigrapha puncticostata, new species.

Bright red-brown, the markings obliterate, reniform alone distinct, dark-filled, pale reddish outlined; two distinct white flecks on costa, followed by three small ones toward apex;

traces of ordinary lines pale, the outer followed by dark points. Hind wing pale fuscous, the veins and margin stained with reddish; a dark fuscous discal point and crenulate broken terminal line. Expanse, 30-32 mm.

Types, male and female, No. 24341, U. S. Nat. Mus.; San Diego, California, February 11-12, 1920 (K. R. Coolidge).

Subfamily CATOCALINÆ

***Nymbis succrassata*, new species.**

Cellular area of fore wing and whole of hind wing below covered with rough erect scales; legs smoothly scaled. Dark brown, the fore wing gray in basal space, shaded with purplish beyond; inner line oblique, denticulate, preceded by a round blackish spot on inner margin; an irregular medial shade line; stigmata obsolete, a brown shade running out from end of cell; outer line strongly incurved centrally, narrow, pale, with dark outer edge; terminal space blackish, with a row of small black dots remote from the margin. Expanse, 45 mm.

Type, male, No. 24342, U. S. Nat. Mus.; Paramaribo, Surinam (C. J. Herring, letter dated December 2, 1882).

Family NOTODONTIDÆ

***Disphragis cubana* Grote.**

Heterocampa cubana Grote, Proc. Ent. Soc. Phil., v, 252, 1865.

Paradise Key, Florida, March 8, 1919, male (Schwarz & Barber). Hitherto unrecorded from the American mainland.

***Disphragis picta* Felder.**

Packard's *Heterocampa obliqua*, var. *perolivata*, is a synonym of *picta*, as originally given by me (Bull. 52, U. S. Nat. Mus., 254, 1903). Barnes & McDunnough have unjustifiably changed the synonymy in their recent list (Check list Lep. Bor. Am., 94, 1917).

Paradise Key, Florida, March 3, 1919 (Schwarz & Barber).

***Disphragis georgiana*, new species.**

Mistaken by Packard in the female for *obliqua* Pack., and figured by him (Mem. Nat. Acad. Sci., vii, pl. 5, fig. 9, 1895).

The true female of *obliqua* is always brown (*trouvelotii* Pack. = *brunnea* G. & R.). In the present species, the sexes are similar.

Discal mark more lunate and blacker than in *obliqua*; pale shade before the subterminal line less contrasted, greener, more extensive, running down to anal angle and not as much broken into spots; dashes between veins 5 and 7 absorbed in the black subterminal shade; terminal line broken into zigzag dashes, more irregular than in *obliqua*.

Types, No. 24160, U. S. Nat. Mus.; one male and two females, Georgia; one female, Florida, without further data.

The larva differs from that of *obliqua* in having the dorsal whitish band less widely extended on the sides and more broadly joined on joints 7-8; but it does not possess these characters in as marked a degree as the larva of *picta*, being intermediate between the two larvæ.

Larval data: Atlanta, Georgia, September 9, 1878 (C. V. Riley); "249L" (C. V. Riley); "281L," June 2, 1873 (C. V. Riley); "249L?," on oak, September 29, 1874 (C. V. Riley); "on oak," July 26, 1882 (young), August 24, 1882 (mature) (C. V. Riley); Tryon, North Carolina (H. G. Dyar).

This may be *varia* Walker (Cat. Brit. Mus., v, 1023, 1855) described from a single female without locality, provided that specimen was American. In Bulletin 52 I made *varia* a synonym of *astarte*; Packard made it the same as *obliqua*, but did not use the name; Barnes & McDunnough use *varia* with *obliqua* as synonym. I have no data beyond Walker's description, which cannot apply to *obliqua* nor *astarte*, coming nearest to the present form.

Disphragis rufinans, new species.

Fore wing gray, with a reddish blotch on inner margin near base and another replacing the lower part of the subapical white streak; subbasal line black, indicated on costal half; a narrow black streak along submedian from base to the red area; inner and outer line black, geminate, pale filled, the outer especially dislocated on the veins and exerted mesially; a white streak from apex beyond outer line; black terminal

dashes, perpendicular to the veins, above vein 2 serially dislocated; black marginal streaks on veins 7 and 8. Hind wing white, with only a little gray on costa and vein 7. Expanse, 45 mm.

Type, male, No. 24348, U. S. Nat. Mus.; Park County, Colorado, 10,000 feet (D. Bruce).

Disphragis baryspus, new species.

Female. Fore wing gray, the olivaceous greenish areas confined to subapical streak, wedge between veins 2-3 and an area below median and vein 2 between inner and subterminal lines; lines black, double; a reddish area before inner line on inner margin and about the black lunate discal mark; a strong black shade beyond the subapical streak, narrowly bordering the wedge 2-3 and running in below it to median vein; veins outwardly black; terminal line black, crenulate, narrowly duplicated. Hind wing dark gray, with white hairs on inner margin. Expanse, 60 mm.

Nearest to *georgiana* Dyar, but the terminal line is even and not angled and dislocated as in that species.

Type, female, No. 24349, U. S. Nat. Mus.; Tryon, North Carolina (W. F. Fiske).

Two males associated with the female are apparently large specimens of *umbrata* Walker (*pulverea* G. & R.), and apparently unrelated to it.

Disphragis pasathelys, new species.

Fore wing gray, without any white shades; a black basal line on submedian; subbasal, inner and outer lines black, geminate, the outer brownish and weak; a lunate discal mark; a black shade through end of cell between veins 2-3 to subterminal; subterminal line of heavy joined black dashes from apex to vein 4, dislocated outward and again inwardly oblique to vein 1; lower portion of wing within this line somewhat darker and more olivaceous. Hind wing white on the disk, costa and outer margin gray, marked on the veins, and a slight terminal line, looped between the veins as on fore wing; a faint outer grayish line, distinct and followed by pale in the costal gray area. Expanse, 52 mm.

Type, No. 24350, U. S. Nat. Mus.; type, female, southern Arizona (E. J. Oslar); paratypes, seven females, four, Jalapa, Mexico (Schaus collection), Orizaba, Mexico, March, 1908 (R. Müller), Zacualpan, Mexico, October, 1917 (R. Müller), Guerrero Mill, Hidalgo, Mexico, 9,000 feet (Mann & Skewes, gift of B. Preston Clark).

Nystalea indiana Grote.

Nystalea indiana Grote, Papilio, iv, 7, 1884.

Nystalea guttulata Schaus, Trans. Am. Ent. Soc., xxx, 143, 1904.

Paradise Key, Florida, March 4, 1919 (Schwarz & Barber).

Nystalea eutalanta, new species.

Near *ebalea* Cramer, smaller, stouter, with a large whitish mark from costa surrounding the discal mark. Shaded with blackish gray; inner line indicated, slightly curved across wing, just beyond origin of vein 2; a rounded black spot below vein 2; outer line indicated, oblique, slender, followed by blackish; terminal space lighter, with a faint wavy dark subterminal line. Hind wing whitish; veins and margin dark fuscous. Expanse, male, 48 mm.; female, 52 mm.

Type, No. 24161, U. S. Nat. Mus.; male, Cocanut Grove, Florida, March 6 (W. H. Broadwell); female, Paradise Key, Florida, March 1, 1919 (Schwarz & Barber).

Family NOCTUIDÆ

Subfamily PANTHEINÆ

Diphthera angelica, new species.

Fore wing even stone-gray, black scales rather coarsely irrorated over a whitish ground; a black mark on base of costa; three lines grouped toward the center of the wing, inner, median and outer, the median heaviest, inbent mesially, denticulate, whitish without. Hind wing whitish, veins and terminal line gray; discal dot showing by transparency; an outer broad gray shade, touching apex and tornus. Expanse, 40 mm.

Type, male, No. 24719, U. S. Nat. Mus.; Los Angeles, California, Mount Lowe, 4,000 feet, September 9, 1920 (K. R. Coolidge).

Family PYRALIDÆ

Subfamily PYRAUSTINÆ

Pyrausta liopasialis Dyar.

Pyrausta liopasialis Dyar, Proc. U. S. Nat. Mus., xlvii, 284, 1914.

Florida specimens agree with this form, described from Panama, rather than with the smaller and redder *rhodope* Hampson (Ann. Mag. Nat. Hist., (8), xii, 36, 1913) from Cuba.

Paradise Key, Florida, March 1, 3, 4, 10, 1919 (Schwarz & Barber).

Edia coolidgei, new species.

Fore wing with the white ground color confined to a submedian line and discal venules; a broad brown shade across middle and at apex, in which the veins are bordered on both sides with blackish; fringe mixed black and white. Hind wing tinged with light gray. Expanse, 12 mm.

Type, female, No. 24346, U. S. Nat. Mus.; Palm Springs, California, July 21, 1920 (K. R. Coolidge).

Evidently allied to *E. minutissima* Smith, which is not before me.

Subfamily SCHOENOBINÆ

Schoenobius uxorialis, new species.

Fore wing short and narrow, the outer margin very oblique, as usual in females of the genus; dark gray, irrorate, the costa narrowly white by reflection; median vein and branches pale; a black discal dot and one on submedian at basal third; small dots at the ends of the veins at base of fringe. Hind wing pale fuscous. Expanse, 18 mm.

Type, male, No. 24347, U. S. Nat. Mus.; Paradise Key, Florida, March 9, 1919 (Schwarz & Barber).

Subfamily PHYCITINÆ

Anegecephalesis catheretes Dyar.

One female, Paradise Key, Florida, March 3, 1919 (Schwarz & Barber).

Subfamily CHRYSAUGINÆ

Artopsis nua Dyar.

Artopsis nua Dyar, Ins. Ins. Mens., ii, 164, 1914.

Two males, Paradise Key, Florida, March 9, 1919 (Schwarz & Barber).

Barnes & McDunnough in their "list" (Check List Lep. Bor. Am., 138, 1917) made this a synonym of *culiculalis* Hulst, which they resurrected from the synonymy for the purpose, and made a variety of *Parachma ochracealis* Walker. That *culiculalis* should be rescued from the synonymy is quite possible, but it cannot be the same as *nua*, for Hulst's description has the hind wings "fuscous ocherous," whereas they are distinctly red in *nua*. Differences in venation may also exist; but Hulst's type is not available to me at this writing. As to *Parachma ochracealis*, I have specimens from Texas agreeing with Hampson's diagnosis (Proc. Zool. Soc. Lond., 659, 1897), certainly generically distinct from *Artopsis nua*.

Xantippe uranides, new species.

Fore wing dark purple-brown, the median space slightly more blackish; lines two, slender, whitish, waved, situated far out, the outer arising from tornus; a series of dark terminal dashes. Hind wing fuscous, lighter toward base. Expanse, 12 mm.

Type, female, No. 24369, U. S. Nat. Mus.; Paradise Key, Florida, February 22, 1919 (Schwarz & Barber).

Xantippe beatifica, new species.

Fore wing purple red, irrorated with ocher nearly half and half; lines yellowish, a little irregular, slightly approaching toward costa. Hind wing rather dark fuscous, somewhat translucent, especially toward base. Expanse, 18 mm.

Type, male, No. 24370, U. S. Nat. Mus.; San Gabriel Mountains, California, 3,000 feet, June 2, 1910 (F. Grinnell, jr.).

Family LIMACODIDÆ

Lithacodes gracea, new species.

Fore wing reddish brown, hind wing dark ocher; a single

rigid slightly oblique line beyond the middle, white, narrow, followed by a narrow purple brown border. Expanse, 19 mm.

Types, four males, No. 24344, U. S. Nat. Mus.; Paradise Key, Florida, March 4 and 9, 1919 (Schwarz & Barber).

The wing-shape of *laticlavata* Clemens, than which this is smaller, the transverse line rigid and narrow, the subapical branch obsolete.

AN UNDESCRIBED WEST AFRICAN SPECIES OF PTYCHOPTERA MEIGEN

(Diptera, Ptychopteridæ)

By CHARLES P. ALEXANDER

In a small collection of crane-flies from the Cameroun sent to me for naming by Dr. Holland and Mr. Kahl of the Carnegie Museum, there was included an undescribed species of *Ptychoptera*. I am indebted to Dr. Holland and Mr. Kahl for the privilege of studying their collections of West African Tipuloidea.

The three known Ethiopian species of *Ptychoptera* may be separated by the following key:

1. Mesonotum orange, unmarked (Natal—Eastern Transvaal),
capensis Alex.¹
Mesonotum blue-black 2
2. Thoracic pleura yellow; wings with the costal margin and apex
dark brown; abdomen black, the third and fourth tergites with
narrow yellow rings (Nigeria).....*africana* Alex.²
Thoracic pleura brownish black with a restricted yellowish white
area ventrad of the anterior spiracle; wings with the costal
margin and apex not conspicuously darkened; abdomen orange,
tergites one to five ringed caudally with brownish black; a
black subterminal ring; hypopygium reddish brown (Cam-
eroun)*camerounensis*, new species

¹ *Ptychoptera capensis* Alex.; Ann. S. Afr. Mus., vol. 17, pp. 139-140; 1917. Type in South African Museum.

² *Ptychoptera africana* Alex.; Entomologist, vol. 53, pp. 101-102; 1920. Type in British Museum.